

Alberta's Transportation Advantage



Alberta
INFRASTRUCTURE

Message from the Minister



There are many good reasons for locating your business in Alberta. Our abundant natural resources, positive business climate and highly skilled work force are just some of the factors that make up the Alberta Advantage.

Transportation plays a key role in that advantage, with our province's excellent highway, rail and air transportation infrastructure. Alberta also offers outstanding access to markets in Western Canada, the U.S. and offshore through Pacific Coast corridors and ports and is a gateway to NAFTA.

Access to markets is critical in today's business climate. In fact, a Fortune Magazine survey of 1,000 major U.S. corporations calls it the number one factor in locating a successful business or plant. You may be surprised to learn that Alberta enjoys direct access to the Western Canada market of over nine million and to a total market of more than 120 million within an 1,800 km radius of the Alberta border. This has allowed Alberta to become Western Canada's distribution hub for the retail, wholesale and manufacturing/processing sectors.

If you are interested in accessing these markets, thinking about starting a new business or getting into value-added processing, I invite you to discover why Alberta should be your location of choice.

[Original signed by Hon. Ed Stelmach, Minister]

Ed Stelmach
Minister, Alberta Infrastructure

Message from the Deputy Minister

Alberta Infrastructure has prepared this analysis as a planning tool to show how your business can reduce expenditures on transportation logistics, distribution and inventory costs by locating in Alberta. It provides information about Alberta's streamlined regulatory framework and low government user charges and taxes. You will learn that Alberta shippers can effectively reach as far north as Alaska, as far south as Mexico, as far west as Los Angeles and as far east as the Mississippi.

If you need clarification about the information provided, please contact us at the phone number or address listed at the end of this document. If you want broader information about locating in Alberta, we will be pleased to put you in contact with the Alberta Department of Economic Development.

[Original signed by E.R. McLellan, P. Eng., Deputy Minister]

E.R. McLellan, P. Eng.
Deputy Minister, Alberta Infrastructure





Alberta's Transportation Advantage

Infrastructure, Services and Regulatory Framework

Alberta's producers and shippers enjoy the lowest access costs for imports to and exports from Western Canada to anywhere in Western North America.

Alberta's efficient, 160,000 km highway network connects population centres and enables producers and shippers to reach markets within and outside the province. Over 28,000 km of these highways are paved.

Highway Infrastructure 1997/98 (2-lane kilometres)

Road Class	Surfaced	Unsurfaced	Total
Primary	14,296	877	15,173
Secondary	10,209	4,859	15,068
Local	3,917	126,657	130,574
Total	28,422	132,393	160,815

Alberta's high-standard highway system routinely handles trucks of up to 62,500 kg and provides links with all major Western North American markets. Higher truck weights and dimensions (turn-pike doubles and triples) provide shippers with the lowest possible unit costs for transporting their goods.

More than 368,000 registered commercial vehicles in Alberta carry goods domestically, interprovincially and internationally.

1998 Fuel Tax Rates (cents per litre)

Fuel Tax	BC*	Alta	Sask	Man
Gasoline	11.0	9.0	15.0	11.5
Diesel	11.5	9.0	15.0	10.5

Source: Alberta Transportation & Utilities
*In Vancouver, fuel tax is 14.0 cents per litre

Alberta has the lowest road fuel taxes in Canada and no provincial sales tax. It reinvests all revenues from fuel taxes and fees to expand and maintain its excellent highway infrastructure.

Annual Government User Charges for Vehicles - 1996 (CDN \$)

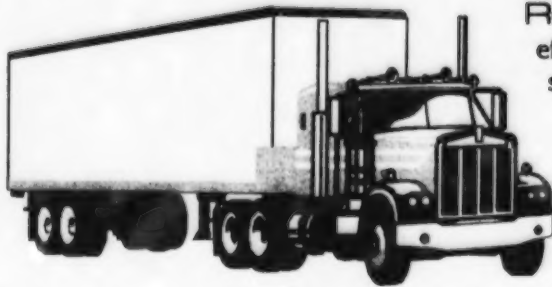
User Charges	BC	Alta	Sask	Man
Car	\$242	\$208	\$335	\$289
Truck	\$9,736	\$7,789	\$12,555	\$9,572

User charges include all direct government charges and are based on:

- car driving 17,500 km per year, split equally between rural and urban travel
- semi-trailer truck (5-axle) driving 150,000 km per year

Source: *Measuring Up, 1995-96 Results*,
Government of Alberta

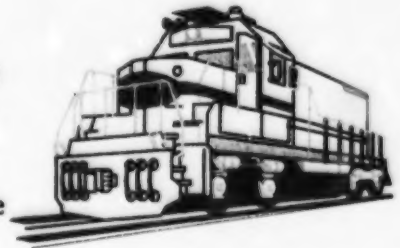
Alberta has the lowest overall highway user charges for automobile and truck operations in Western Canada. These include direct government charges such as operator licenses, vehicle registrations and fuel taxes.



Road: Four-laned, interstate-quality roads provide fast, efficient and safe access to major markets, along north-south and east-west trade corridors.

Alberta's trucking sector is completely deregulated, except for safety compliance. This allows shippers and receivers to negotiate highly competitive freight rates.

Rail: Two national railways - Canadian Pacific Railway Company (CPR) and Canadian National (CN) - serve Alberta. Alberta is also home to RailLink Ltd., one of Canada's largest shortline rail operators, as well as the newest, Alberta RailNet Inc. Alberta's railways operate approximately 8,000 km of track within the province, connecting it to all of Canada, North America and major ocean ports. Both CPR and CN have or are building major new intermodal terminals in Edmonton and Calgary.



Air: Alberta has the advantage of two international airports; Calgary and Edmonton, that provide direct service to many North American and international cities. A number of regional airports connect with North American and international cities through Alberta's international airports. All airports provide important access to global locations.



Los Angeles	Denver	Minneapolis	London, UK
San Francisco	Dallas	Chicago	Manchester, UK
Seattle	Houston	Phoenix	Frankfurt
Portland	Nashville	Las Vegas	Spokane

Transport Sector

Alberta is a major player in Canada's transportation sector. Several key carriers, including Canadian Airlines, WestJet Airlines Ltd., CPR, Greyhound Canada Transportation Corporation, Trimac Transportation System and Canadian Freightways Ltd. have head offices in Alberta.

Alberta's transportation sector constitutes 9% of the Gross Domestic Product and is growing faster than the overall economy.

Alberta is a trading centre, with more than 60% of its production being exported (for more information on provincial transportation and trade, visit the Alberta Infrastructure web site at http://www.tu.gov.ab.ca/trans_trade/pol008.htm).

Boyd Group, a corporate office location specialist based in the U.S., singles out Edmonton and Calgary as the fastest growing corporate locations in Canada. Calgary was described "as a head office location and transportation hub" with Edmonton as the "service centre for the oil industry and home to many biotechnology firms."

Access, Access, Access

Fortune Magazine conducted a survey of 1,000 major U.S. corporations to determine the most important factors for locating a new plant. These are:

Site Selection Criteria

Service Corporations & Head Offices

1. Access to markets
2. Easy access to people
3. Efficient transport facilities

Industrial & Manufacturing Plants

1. Access to trucking
2. Access to markets
3. Cost of labour

Source: Fortune Magazine

preferred location = best
access to markets

The results of the survey clearly indicate that access to markets is one of the major location factors for corporations selecting a new site.

Market Size and Critical Mass in Western Canada

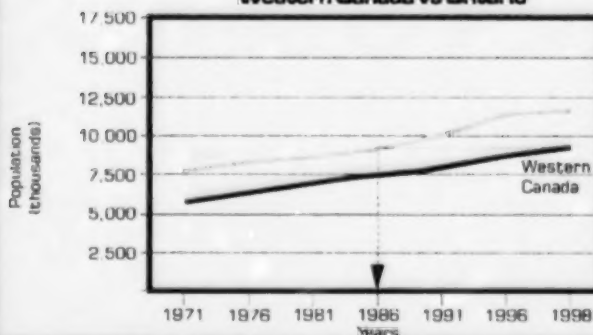
Market size is key to the successful development of any manufacturing, processing or distribution activity. There must be a critical population mass to support investment in new facilities.

Western Canada Market 1971-1998
(population in thousands)

Year	BC	Alta	Sask	Man	Western Canada	Ont
1971	2,185	1,628	926	988	5,727	7,703
1976	2,467	1,838	921	1,022	6,248	8,264
1981	2,744	2,238	968	1,026	6,976	8,625
1986	2,889	2,375	1,010	1,071	7,345	9,114
1991	3,282	2,546	989	1,092	7,909	10,085
1996	3,882	2,781	1,022	1,137	8,822	11,264
1998	4,009	2,915	1,024	1,139	9,087	11,414

Source: Statistics Canada CANSIM, Matrices 6367-6379

Market Size Comparison
Western Canada vs Ontario



The total population of Western Canada was over 9 million in 1998 and was growing faster than the national average.

The Western Canada market is now the same size as the Ontario market in the mid 1980s and can easily support an expanded industrial base.

Size of Western Canada Economy
1997

\$ Billions	BC	Alta	Sask	Man	Total	Ont
GDP	\$109	\$101	\$28	\$28	\$267	\$347

Expenditure Based

Source: Statistics Canada CANSIM matrices 9015-9026

Metropolitan Markets in Western Canada

Regina, Saskatoon, Winnipeg, Calgary, Edmonton and Vancouver are the six major metropolitan markets in Western Canada.

They make up more than half the population of Western Canada and are its major economic growth centres, with a combined population of over 4.9 million.

While Vancouver is the largest single market in Western Canada, the cities of Edmonton and Calgary have a combined population of almost 1.8 million, slightly less than Vancouver.

Major Western Canadian Markets

Metropolitan Centre	Population (1998)
Calgary	907,112
Edmonton	917,536
Regina	199,539
Saskatoon	229,302
Vancouver	1,995,927
Winnipeg	676,432
Total	4,925,848
% of Western Canada	54.2%
Source: Statistics Canada, Cat. 91-213-XPB	

Distance to Markets

Industry's preferred location provides the highest level of access to major markets, i.e., the lowest transport costs.

Transportation costs are directly related to distance. In other words, the further the distance to a market, the more expensive it usually is to reach that market.

Distance to Markets (km)

CITY	Calgary	Edmonton	Regina	Saskatoon	Vancouver	Winnipeg
Calgary	-	278	758	610	962	1,329
Edmonton	278	-	782	523	1,180	1,302
Regina	758	782	-	257	1,720	575
Saskatoon	610	523	257	-	1,567	776
Vancouver	962	1,180	1,720	1,567	-	2,291
Winnipeg	1,329	1,302	575	776	2,291	-
TOTAL	3,937	4,065	4,092	3,733	7,720	6,273

Source: Rand McNally Motor Carriers Atlas 1999

Saskatoon is closest to all other western centres, followed by Calgary and Edmonton. Vancouver and Winnipeg are farthest from the other major market centres in Western Canada.

Minimizing Market Access Costs

Industry's preferred location minimizes market access costs. An index, based on the product of distance to market times the population, closely approximates market access costs.

Alberta is optimally located to minimize market access costs directly related to transportation or distribution.

**Western Canada
Major Market Centres**



CALGARY and EDMONTON combine their larger size with relative closeness to markets to provide optimum locations.

**Market Access Cost Index for Major
Western Canada Markets**

CITY	MARKET ACCESS COST INDEX	COMPARISON COST INDEX
Calgary	3,365	100
Edmonton	3,764	112
Vancouver	4,208	125
Regina	4,598	137
Saskatoon	4,737	141
Winnipeg	7,266	216

Market Access Cost Index = sum of population at each destination
x distance (km) from city of origin

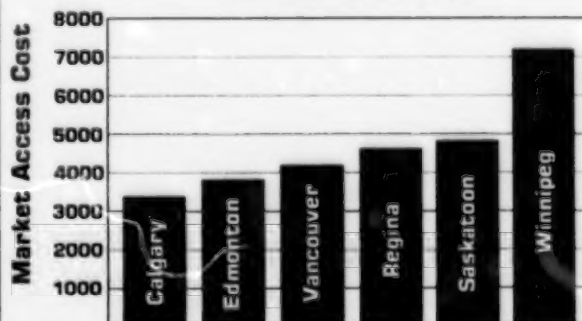
The superior locations of Calgary and Edmonton in relation to markets have allowed Alberta to become the distribution hub for Western Canada in retail, wholesale and manufacturing/processing sectors.

Based on the market access cost index methodology, the locational choice between Calgary and Edmonton is essentially equal. Individual requirements will determine a firm's choice of business location, but Alberta cities should be at the top of the list.



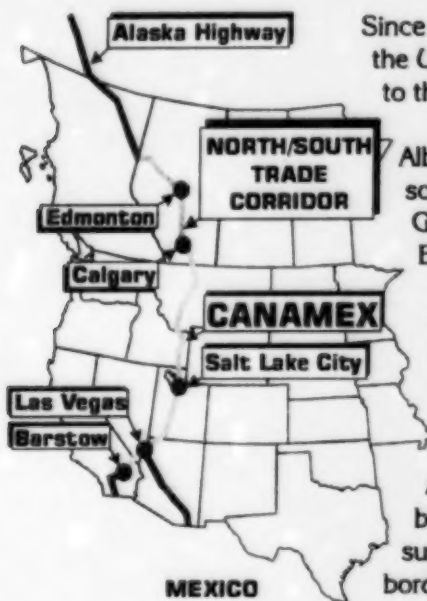
Tibbet & Britten Group, a world renowned supply logistics firm, has located all its western distribution centres in Alberta for clients such as Wal-Mart, Safeway and Shopper's Drug Mart.

**Market Access Cost Index
for Major Western
Canada Markets**



Additionally, individual national firms such as Home Hardware Stores, Finning Canada Ltd. and Overwaitea Food Group have distribution centres located in Alberta.

Western North American Market



Since the signing of the Free Trade Agreement in 1988, Alberta trade with the U.S. has more than doubled. Almost \$4 billion was exported by truck to the U.S. in 1995, and almost \$3 billion by rail.

Alberta is enhancing its North-South Trade Corridor, which stretches some 1,200 km (750 miles) from the British Columbia border, west of Grande Prairie and the start of the Alaska Highway, through Edmonton and Calgary to Coutts on the U.S. border.

The North-South Trade Corridor links the Alaska Highway to the north with the CANAMEX Trade Corridor at the Montana border. CANAMEX follows Interstate 15 south through Idaho, Utah, Nevada, California, Arizona and Mexico.

A joint vehicle inspection station is located at the Alberta/Montana border and a new border crossing station is being developed to support the efficient movement of goods across the Canada/U.S. border.

Truck weights and dimensions will be harmonized under CANAMEX to facilitate the movement of 129,000 lb (58,514 kg) trucks. This will represent a cost savings of at least 30% over existing maximum payloads.

1995 Exports By Truck To The U.S.



Source: Statistics Canada

1995 Value By Rail To The U.S.



Source: Statistics Canada

Trade access also exists along Interstate 25, or the Camino Real Corridor, which runs east of CANAMEX, to Montana, Wyoming, Colorado, New Mexico, and Texas to Mexico.

Western U.S. centres are becoming extremely important markets for Western Canadian manufacturers and industries.

Within the 1,800 km (1,119 mile) radius of the Alberta border, shippers can effectively reach as far north as Alaska, as far south as Mexico, as far west as Los Angeles, and as far east as the Mississippi. This represents a total market of more than 120 million people within this radius.

Major Western U.S. Metropolitan Markets

The primary metropolitan centres in the U.S. (west of Kansas City) with more than 1 million in population constitute a market of almost 37 million.

The Western U.S. markets comprise a consumer base that is larger than all of Canada and around ten times larger than the Western Canada market.

Market Access Cost Index for Western Canada to Western U.S. Centres

The cost index of accessing western U.S. markets is calculated as the volume of the product times the distance to each market.

Since U.S. populations and market sizes dwarf those of Western Canadian cities, the population was divided by 10 (like the rule of 10 when comparing the U.S. and Canada). Even then, the influence of U.S. markets is still larger.

Market Access Cost Index to Western North America

City	Western Canada	Western U.S.	Total	Comparison Cost Index
Calgary	3.4	9.2	12.5	100
Vancouver	4.2	8.6	12.8	102
Edmonton	3.8	10.2	13.9	111
Regina	4.6	9.4	14.0	112
Saskatoon	4.7	9.8	14.6	116
Winnipeg	7.3	10.0	17.3	138

The first and third best locations for market access are in Alberta. Vancouver, being closer to major California markets, is the second best location.

Alberta is the best location overall. It is highly competitive with Vancouver, particularly if the basic investment is to be supported by the local Western Canada market.

Primary Metropolitan Population of Western U.S. Centres: 1997

City Population (in thousands)

Los Angeles	9,128	Seattle	2,235	San Antonio	1,490
Houston	3,792	Denver	1,867	Sacramento	1,482
Dallas	3,048	Portland	1,759	Salt Lake City	1,218
Phoenix	2,747	Kansas	1,690	Las Vegas	1,201
San Diego	2,655	San Francisco	1,655	Oklahoma	1,027

Total Combined Population of These Cities 36,994

Source: Population Estimates Program, Population Division, U.S. Bureau of the Census. Release date: Dec. 1997

Reaching Global Markets



Alberta is ideally situated on the great circle polar air routes connecting Western North America's U.S. and Canadian centres to Asia and Europe.

Calgary and Edmonton International Airports can accommodate the largest wide-body jets on a 24 hour basis all year round.

Alberta's aviation fuel taxes are the lowest in Western Canada, at 1.5 cents per litre.

There is ample space at these airports to significantly expand handling and storage facilities.

Several rail and highway corridors connect Alberta to tidewater. These corridors include: the Crowsnest to the south, the Trans-Canada through Banff, the Yellowhead through Jasper and the Northwest corridor from Grande Prairie to Prince Rupert. The Northwest corridor is the shortest route to northern Pacific Rim countries.

Alberta is served by the Canadian west-coast ports of Vancouver and Prince Rupert/Kitimat, as well as Seattle/Tacoma, Washington and Portland, Oregon in the U.S.

Gateway to NAFTA - Alberta and the CANAMEX Corridor

1997 NAFTA Economies

\$ Billions Canada Mexico U.S.A.

(US\$) GDP	\$632	\$402	\$8,111
Source: Statistics Canada, Bank of Canada, U.S. Dept. of Commerce, Bureau of Economic Analysis & World Bank			

As a NAFTA gateway (North American Free Trade Agreement), Alberta has cost effective transportation services and infrastructure that permits ready market access for both international importers and exporters. Full CANAMEX implementation will serve to further increase transportation efficiencies and reduce trucking costs.

For further information, please contact:

To find out more about doing business in Alberta, we invite you to visit the following web sites:

<http://www.gov.ab.ca/prosperity.cfm>

http://www.tu.gov.ab.ca/trans_trade/pol008.htm

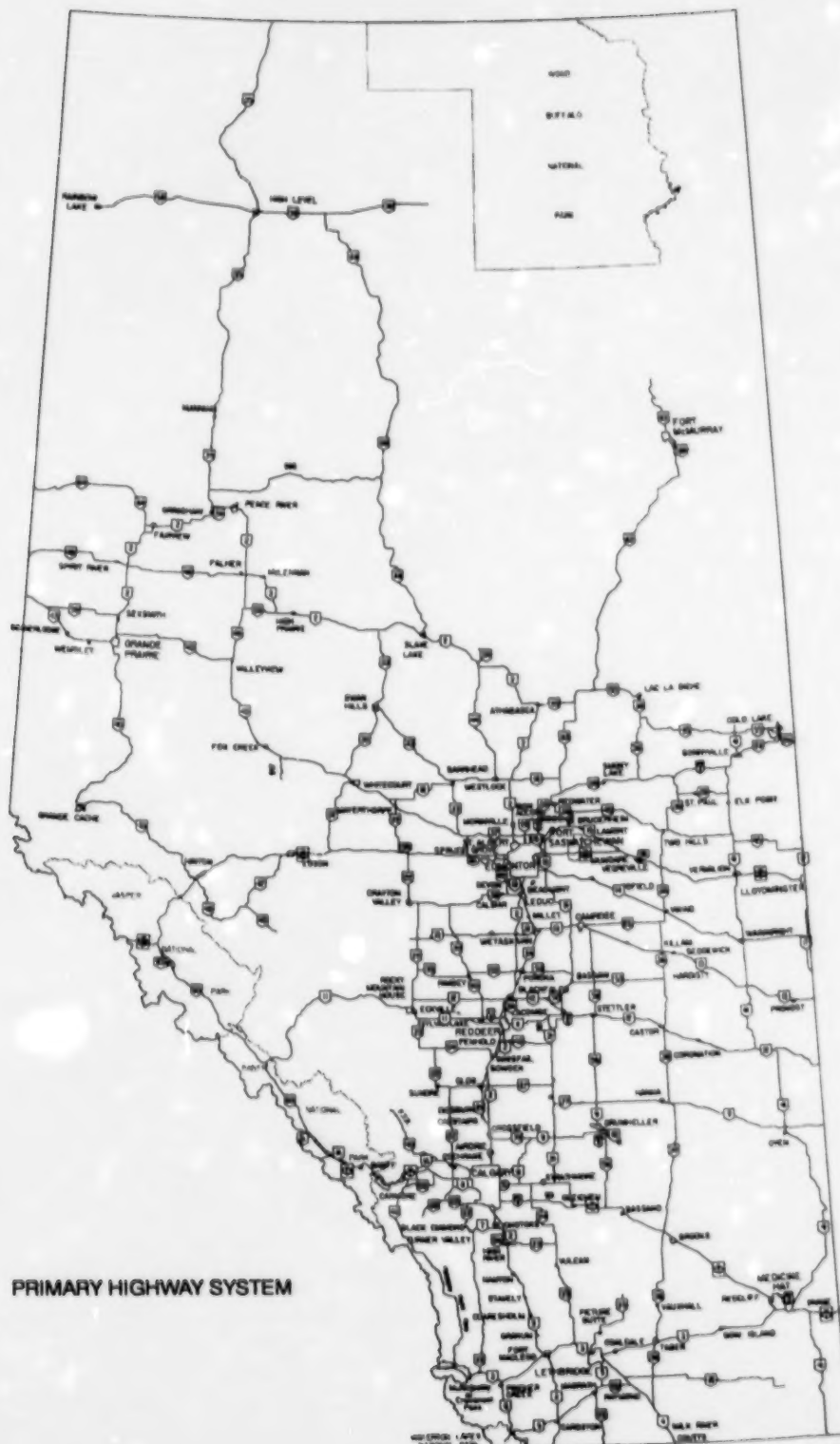
<http://www.edt.gov.ab.ca/>

<http://www.AlbertaFirst.com/>

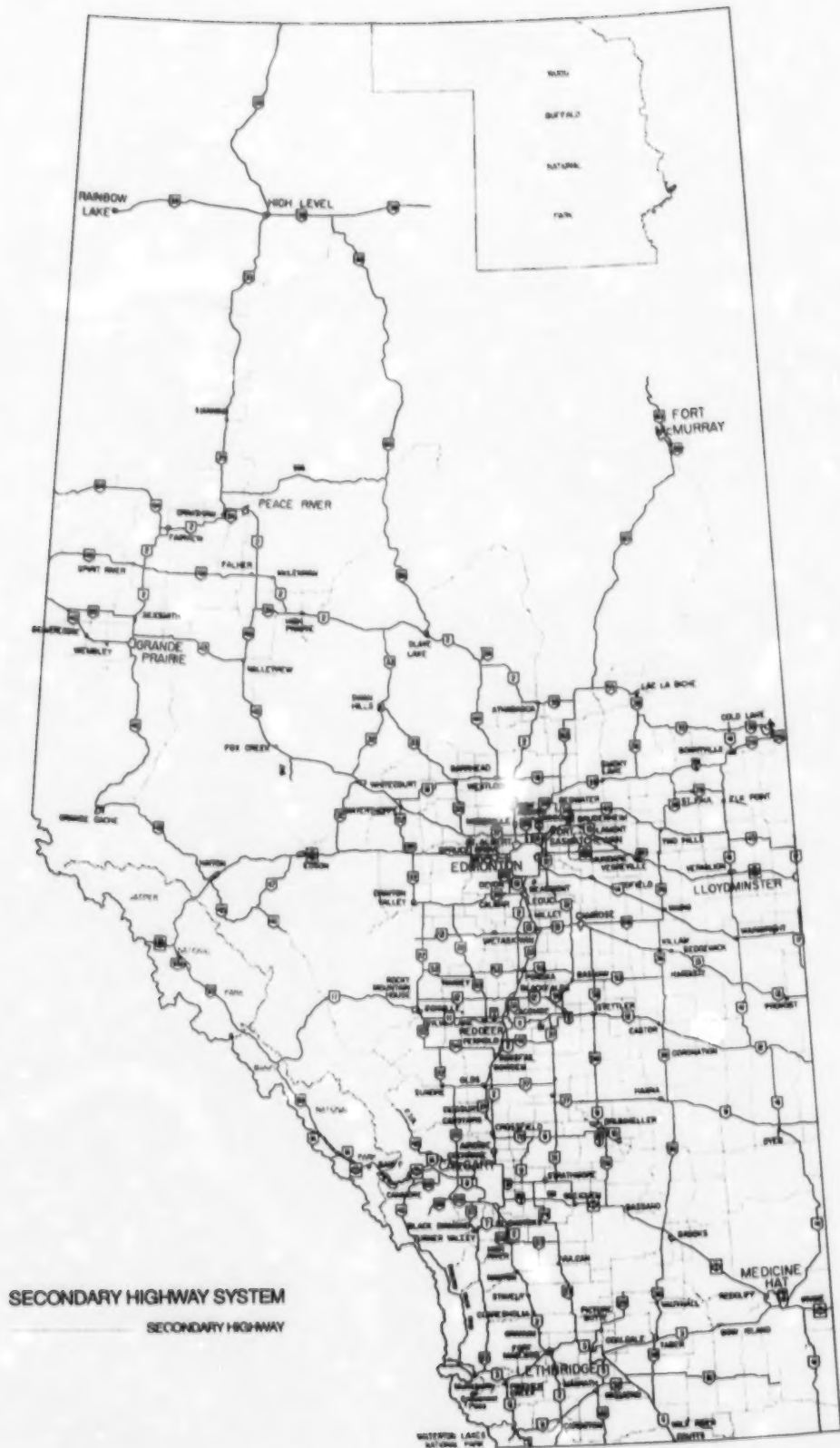
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For updates, this document is also available on the Alberta Infrastructure web site located at:
<http://www.tu.gov.ab.ca/>



PRIMARY HIGHWAY SYSTEM



EXISTING ALBERTA RAIL NETWORK (1999)

SOURCES: C.N.R., C.P.R., And RAILINK/C.W.R.

CANADIAN NATIONAL RAILWAY

CANADIAN PACIFIC RAILWAY

RAILINK / CENTRAL WESTERN RAILWAY

ALBERTA PRAIRIE STEAM TOURS /
EAST CENTRAL ALBERTA HERITAGE SOCIETY

ALBERTA RAILNET



● AIRPORTS WITH DAILY SCHEDULED AIR SERVICE

